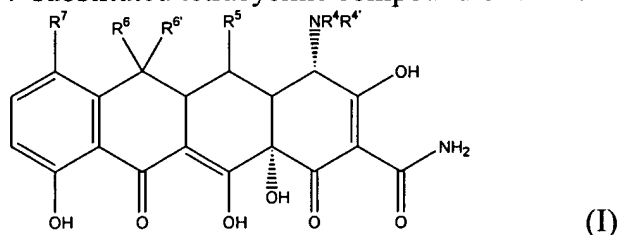


AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A 7-substituted tetracycline compound of the formula:



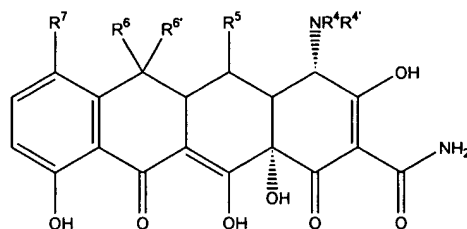
wherein:

- R⁴ and R^{4'} are each alkyl;
- R⁵ is hydrogen, hydroxyl, or a prodrug moiety;
- R⁶ and R^{6'} are each independently hydrogen, hydroxyl, alkyl, or taken together, alkenyl;
- R⁷ is an N-substituted phenyl; and pharmaceutically acceptable salts thereof, and pharmaceutically acceptable salts thereof.

2. (Original) The compound of claim 1, wherein R⁵, R⁶ and R^{6'} are each hydrogen and R⁴ and R^{4'} are each methyl.
3. (Original) The compound of claim 1, wherein R⁷ is 2-N-substituted phenyl.
4. (Original) The compound of claim 3, wherein said 2-N-substituted phenyl is substituted with a nitro group.
5. (Original) The compound of claim 4, wherein said compound is 7-(2-nitrophenyl) sancycline.
6. (Original) The compound of claim 3, wherein said 2-N-substituted phenyl is 2-amino substituted.
7. (Currently Amended) The compound of claim ~~5~~6, wherein said 2-amino substituent is dialkylamino.

8. (Original) The compound of claim 3, wherein said compound is selected from the group consisting of 7-(2-aminophenyl) sancycline, 7-(2-nitrophenyl) sancycline, 7-(2-N,N,-dimethylaminophenyl) sancycline, 7-(2-N,N,-diethylaminophenyl) sancycline, 7-(2-N,N,-dipropylaminophenyl) sancycline, and 7-(2-N,N,-dibutylaminophenyl) sancycline.
9. (Original) The compound of claim 7, wherein said dialkyl amino group is dimethylamino.
10. (Currently Amended) The compound of claim 9, wherein said compound is 7-([4]2-N,N,-dimethylaminophenyl) sancycline.
11. (Original) The compound of claim 1, wherein R⁷ is 3-N-substituted phenyl.
12. (Currently Amended) The compound of claim ~~10~~ 11, wherein said 3-N-substituted phenyl is substituted with a nitro group.
13. (Original) The compound of claim 12, wherein said compound is 7-(3-nitrophenyl) sancycline.
14. (Original) The compound of claim 11, wherein said 3-N-substituted phenyl is 3-amino substituted.
15. (Original) The compound of claim 14, wherein said 3-amino substituent is dialkylamino.
16. (Currently Amended) The ~~method~~ compound of claim 14, wherein said compound is selected from the group consisting of 7-(3-aminophenyl) sancycline, 7-(3-N,N,-dimethylaminophenyl) sancycline, 7-(3-N,N,-diethylaminophenyl) sancycline, 7-(3-N,N,-dipropylaminophenyl) sancycline, and 7-(3-N,N,-dibutylaminophenyl) sancycline.
17. (Original) The compound of claim 15, wherein said dialkyl amino group is dimethylamino.
18. (Currently Amended) The compound of claim 17, wherein said compound is 7-([4]3-N,N,-dimethylaminophenyl) sancycline.

19. (Original) The compound of claim 1, wherein R^7 is 4-N-substituted phenyl.
20. (Original) The compound of claim 19, wherein said 4-N-substituted phenyl is substituted with a nitro group.
21. (Original) The compound of claim 20, wherein said compound is 7-(4-nitrophenyl) sancycline.
22. (Original) The compound of claim 19, wherein said 4-substituted phenyl is 4-amino substituted.
23. (Currently Amended) The compound of claim 22, wherein said 4-amino substituent is dialkylamino.
24. (Currently Amended) The ~~method~~ compound of claim 23, wherein said compound is ~~7-(4-aminophenyl) sancycline~~, 7-(4-N,N,-diethylaminophenyl) sancycline, 7-(4-N,N,-dipropylaminophenyl) sancycline, or 7-(4-N,N,-dibutylaminophenyl) sancycline.
25. (Currently Amended) The compound of claim 23, wherein said dialkyl amino group is dimethylamino.
26. (Original) The compound of claim 25, wherein said compound is 7-(4-N,N,-dimethylaminophenyl) sancycline.
27. (Original) A method for treating a tetracycline responsive state in a mammal, comprising administering to said mammal a 7-substituted tetracycline compound of formula (I):



(I)

wherein:

R^4 and $R^{4'}$ are each alkyl;

R^5 is hydrogen, hydroxyl, or a prodrug moiety;

R^6 and $R^{6'}$ are each independently hydrogen, hydroxyl, alkyl, or taken together, alkenyl;

R^7 is an N-substituted phenyl; and pharmaceutically acceptable salts thereof, such that the tetracycline responsive state is treated.

28. (Original) The method of claim 27, wherein R^5 , R^6 and $R^{6'}$ are each hydrogen and R^4 and $R^{4'}$ are each methyl.

29. (Original) The method of claim 27, wherein R^7 is 2-N-substituted phenyl.

30. (Original) The method of claim 29, wherein said 2-N-substituted phenyl is substituted with a nitro group.

31. (Original) The method of claim 29, wherein said 2-N-substituted phenyl is 2-amino substituted.

32. (Original) The method of claim 29, wherein said compound is selected from the group consisting of 7-(2-aminophenyl) sancycline, 7-(2-nitrophenyl) sancycline, 7-(2-N,N,-dimethylaminophenyl) sancycline, 7-(2-N,N,-diethylaminophenyl) sancycline, 7-(2-N,N,-dipropylaminophenyl) sancycline, and 7-(2-N,N,-dibutylaminophenyl) sancycline.

33. (Original) The method of claim 27, wherein R^7 is 3-N-substituted phenyl.

34. (Original) The method of claim 33, wherein said 3-N-substituted phenyl is substituted with a nitro group.

35. (Original) The method of claim 33, wherein said 3-N-substituted phenyl is 3-amino substituted.

36. (Original) The method of claim 33, wherein said compound is selected from the group consisting of 7-(3-aminophenyl) sancycline, 7-(3-nitrophenyl) sancycline, 7-(3-N,N,-dimethylaminophenyl) sancycline, 7-(3-N,N,-diethylaminophenyl) sancycline, 7-(3-N,N,-dipropylaminophenyl) sancycline, and 7-(3-N,N,-dibutylaminophenyl) sancycline.

37. (Original) The method of claim 27, wherein R^7 is 4-N-substituted phenyl.

38. (Original) The method of claim 37, wherein said 4-N-substituted phenyl is substituted with a nitro group.
39. (Original) The method of claim 37, wherein said 4-substituted phenyl is 4-amino substituted.
40. (Currently Amended) The method of claim ~~39~~ 37, wherein said compound is 7-(4-aminophenyl) sancycline, 7-(4-nitrophenyl) sancycline, 7-(4-N,N,-dimethylaminophenyl) sancycline, 7-(4-N,N,-diethylaminophenyl) sancycline, 7-(4-N,N,-dipropylaminophenyl) sancycline, or 7-(4-N,N,-dibutylaminophenyl) sancycline.
41. (Original) The method of claim 27, wherein said tetracycline responsive state is a bacterial infection.
42. (Original) The method of claim 41, wherein said bacterial infection is associated with *E. coli*.
43. (Original) The method of claim 41, wherein said bacterial infection is associated with *S. aureus*.
44. (Original) The method of claim 41, wherein said bacterial infection is associated with *E. faecalis*.
45. (Original) The method of claim 41, wherein said bacterial infection is resistant to other tetracycline antibiotics.
46. (Original) The method of claim 27, wherein said compound is administered with a pharmaceutically acceptable carrier.
47. (Original) A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 1 and a pharmaceutically acceptable carrier.
48. (Original) The pharmaceutical composition of claim 47, wherein said compound is selected from the group consisting of 7-(2-aminophenyl) sancycline, 7-(2-nitrophenyl) sancycline, 7-(2-N,N,-dimethylaminophenyl) sancycline, 7-(2-N,N,-diethylaminophenyl) sancycline, 7-(2-N,N,-dipropylaminophenyl) sancycline, 7-(2-N,N,-

dibutylaminophenyl) sancycline, 7-(3-aminophenyl) sancycline, 7-(3-nitrophenyl) sancycline, 7-(3-N,N,-dimethylaminophenyl) sancycline, 7-(3-N,N,-diethylaminophenyl) sancycline, 7-(3-N,N,-dipropylaminophenyl) sancycline, 7-(3-N,N,-dibutylaminophenyl) sancycline, 7-(4-aminophenyl) sancycline, 7-(4-nitrophenyl) sancycline, 7-(4-N,N,-dimethylaminophenyl) sancycline, 7-(4-N,N,-diethylaminophenyl) sancycline, 7-(4-N,N,-dipropylaminophenyl) sancycline, and 7-(4-N,N,-dibutylaminophenyl) sancycline.

49. (New) The compound of claim 22, wherein said compound is 7-(4-aminophenyl)sancycline.